



# भारत का राजपत्र

## The Gazette of India

प्राधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

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No. 46] NEW DELHI, SATURDAY, NOVEMBER 13, 1993 (KARTIKA 22, 1915)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके  
[Separate paging is given to this Part in order that it may be filed as a separate compilation]

भाग III—खण्ड 2  
[PART III—SECTION 2]

पेटेंट कार्यालय द्वारा जारी की गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस  
[Notifications and Notices Issued by the Patent Office relating to Patents and Designs]

THE PATENT OFFICE

PATENTS AND DESIGNS

Calcutta, the 13th November 1993

ADDRESS AND JURISDICTION OF OFFICES OF THE  
PATENT OFFICE

The Patent Office has its Head Office at Calcutta and Branch Offices at Bombay, Delhi and Madras having territorial jurisdiction on a zonal basis as shown below:—

Patent Office Branch,  
Todi Estates, III Floor,  
Lower Parel (West), Bombay-400 013.

The States of Gujarat, Maharashtra and Madhya Pradesh and the Union Territories of Goa, Daman and Diu and Dadra and Nagar Haveli.

Telegraphic address "PATOFFICE".

Patent Office Branch,  
Unit No. 401 to 405, III Floor,  
Municipal Market Building,  
Saraswati Marg, Karol Bagh,  
New Delhi-110 005.

The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan and Uttar Pradesh and the Union Territories of Chandigarh and Delhi.

Telegraphic address "PATENTOFIC".

Patent Office Branch,  
61, Wallajah Road,  
Madras-600 002.

The States of Andhra Pradesh, Karnataka, Kerala, Tamilnadu and the Union Territories of Pondicherry, Laccadive, Minicoy and Aminidivi Islands.

Telegraphic address "PATENTOFIS".

Patent Office (Head Office),  
"NIZAM PALACE", 2nd M.S.O Building,  
5th, 6th and 7th Floor,  
234/4, Acharya Jagadish Bose Road,  
Calcutta-700 020.

Rest of India.

Telegraphic address "PATENTS".

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 or the Patents Rules, 1972 will be received only at the appropriate Offices of the Patent Office.

*Fees* :—The fees may either be paid in cash or may be sent by Money Order payable to the Controller at the appropriate Offices or by bank draft or cheque, payable to the Controller drawn on a scheduled bank at the place where the appropriate office is situated.

पेटेंट कार्यालय  
एकात्म तथा अभिकल्प  
कलकत्ता, दिनांक 13 नवम्बर 1993

पेटेंट कार्यालय के कार्यालयों के पते एवं क्षेत्राधिकार

पेटेंट कार्यालय का प्रधान कार्यालय कलकत्ते में अवस्थित है तथा बम्बई, दिल्ली एवं मद्रास में इसके शास्त्र कार्यालय हैं, जिनके ग्राहकोंशक्ति क्षेत्राधिकार जात के आधार पर निम्न रूप में प्रदर्शित हैं :—

पेटेंट कार्यालय शास्त्र, टोर्च इस्टेट,  
तीसरा तल, लोअर पर्टल (पीश्चम),  
बम्बई-400013।

गुजरात, महाराष्ट्र तथा बंधु प्रदेश राज्य  
क्षेत्र एवं संघ शासित क्षेत्र गोआ, दमन तथा  
दीव एवं बांदरा और नगर हैदराबाद।

तार पता—“पेटेंटोफिस”

पेटेंट कार्यालय शास्त्र,  
एकक सं. 401 से 405, तीसरा तल,  
नगरपालिका बांदरा भवन,  
मरुती मार्ग, करोल बाग,  
बम्बई-110005।

हरियाणा, हिमाचल प्रदेश, बम्बई तथा कर्मांग,  
पंजाब, राजस्थान तथा उत्तर प्रदेश राज्य क्षेत्रों  
एवं संघ शासित क्षेत्र बंडूगढ़ तथा विल्ली।

तार पता—“पेटेंटोफिस”

CORRIGENDUM

In the Gazette of India, Part III, Sec. 2, dated the 4th July 1992, (a) In page-826, Col. 2, for application for Patent No. 635/Del/87 filed on 27th July, 1987 read the accepted No. as 171014 instead of 17104.

(b) In page 834, Col. 2, for application for Patent No. 669/Mas/89 filed on 7th September 1989 read the applicants as AKZO N.V. instead of AKZD N.V.

(c) In Page-840, Col. 2, for application for Patent No. 330/Cal/89 filed on 28th April 1989 read the accepted No. as 171039 and Applicants as FRANZ PIASSER BAHN-BAUMASCHINEN INDUSTRIESFILLSCHAFT M.B.H. instead of FANZ PIASSER BMAHNBAAUMASCHINEN-INDUSTRIESEIJSCHAFT M.B.H.

(d) In page-840, Col. 2, for application for Patent No. 395/Cal/89 filed on 23rd May, 1989 read the applicants as F.I. DU PONT DE NEMOURS & CO instead of E.I DU PONT NEMOURS CO.

In the Gazette of India Part-III, sec. 2, dated the 18th July, 1992, Page-880, col. 2, for application for Patent No 244/Cal/88 filed on 23rd March, 1988 read the applicants as SIEMENS AKTIENGESELLSCHAFT instead of SIFMENS AKTIFNGESSELLSCHAFT.

In the Gazette of India, Part III, sec. 2, dated the 8th August, 1992, (a) In page 969, col. 1 for application for Patent No. 224/Mas/88 filed on 7th April 1988 read the applicants as MASCHINENFABRIK RIETER AG. instead of MACHINENFABRIK RIETER AG.

पेटेंट कार्यालय शास्त्र,  
61, बालाजाह एड,  
मद्रास-600002।

बालाजाह प्रदेश, कलाटिक, केरल, तमिलनाडु राज्य  
क्षेत्र एवं संघ शासित क्षेत्र पांडिचेरी, लक्ष्मीगंगा,  
मिनिमिकाब तथा एमिनिमिकिविदि द्वीप।

तार पता—“पेटेंटोफिस”

पेटेंट कार्यालय (प्रधान कार्यालय),  
निजाम पैसेस, विवरणीय बहुतालीय कार्यालय,  
भवन 5, 6 तथा 7वा तल,  
234/4, आचार्य जगदीश बोस रोड,  
कलकत्ता-700020।

भारत का बदलें लें।

तार पता—“पेटेंटैस”

पेटेंट अधिनियम, 1970 या पेटेंट नियम, 1972 में बदली-क्षेत्र सभी आवेदन-पत्र, सूचनाएं, विवरण या उन्हें प्रलेख पेटेंट कार्यालय के केवल उपयुक्त कार्यालय में ही प्राप्त किए जाएंगे।

बालुक :—बालुकों की बहायगी या तो नकद की जाएगी जबवा उपयुक्त कार्यालय में नियंत्रक और भूजतान योग्य भनावेश वयवसा आक बदलें या जहां उपयुक्त कार्यालय अवस्थित है; उत्त स्वाल के बनास्त्रित बैंक से नियंत्रक को भूजतान योग्य बैंक ब्राफ्ट वयवसा बैंक ध्वारा की जा सकती है।

(b) In page-971, col. 1, for application for Patent No. 603/Mas/88 filed on 29th August 1988 read the accepted No. as 171166 instead of 17166.

(c) In page-985, col. 1, for application for Patent No. 230/Bom/89 filed on 17th August 1989 read the accepted No. as 171182 instead of 17182.

In Gazette of India, Part III, sec. 2, dated the 15th August, 1992 (a) In page-990, col. 2 for application for Patent No. 743/Del/87 filed on 24th August 1987 read the applicants as COLGATE-PALMOLIVE CO. instead of COLGATE-PALMOLIV CO.

(b) In page-991, col. 1, for application for Patent No. 749/Del/87 filed on 25th August 1987 read the accepted No. as 171200 instead of 171260.

(c) In page-999, col. 1, for application for Patent No. 117/Cal/89 filed on 8th February 1989 read the applicants as LANXIDE TECHNOLOGY CO., I.P.

In the Gazette of India, Part III, sec. 2, dated the 22nd, August, 1992, (a) In page-1041, col. 2, for application for Patent No. 736/Cal/88 filed on 1st September 1988 read the accepted No. as 171235 instead of 172135.

(b) In page-1043, col. 2, for application for Patent No. 808/Cal/90 filed on 17th September 1990 read the accepted No.

Alteration of the address in the Register of Patent Agents under rule 103 of the Patents Rules, 1972

The address of the principal place of business of the following Register Patent Agent has been altered to:

C/o Rajagopalan and Associates  
Room No. 6, II floor,  
Hoare Miller Building,  
15, Ganesh Chandra Avenue,  
Calcutta-700013.

**APPLICATION FOR PATENT FILED AT THE HEAD OFFICE AT 234/4, ACHARYA JAGADISH BOSE ROAD, CALCUTTA-20**

The dates shown in the crescent branch are the dates claimed under section-135, of the Patents Act, 1970.

24th September 1993

561/Cal/93. Saha Institute of Nuclear Physics, Reference-Signal Interference Preventive phase-Detector for application in phase lock loop.

562/Cal/93. Edward Koppelman. Method and apparatus for upgrading carbonaceous fuel.

27th September 1993

563/Cal/93. Texaco Development Corporation. Method for Atomizing Feedstock in a Fluid catalytic cracking process.

564/Cal/93. Hitachi Construction Machinery Co. Ltd. Hydraulic circuit system for civil Engineering and construction machines.

565/Cal/93. Skw Trostberg Aktiengesellschaft. Process for the extraction of fats and oils.

566/Cal/93. Danieli & C. Officine Meccaniche SPA. Mould for the continuous casting of thin slabs.

567/Cal/93. Tatsuo Ono. Connecting Pin.

28th September 1993

568/Cal/93. I-Cheng Wu. Method for making Smokeless Mosquito-Repellent Incense.

569/Cal/93. Framatome Connectors International Tour Fiat. Tool-Holder Internal unclamping machining.

570/Cal/93. Siemens Aktiengesellschaft. Decoupling A High-Frequency Error Signal from a high-Frequency electromagnetic field in a Large Electric Machine.

571/Cal/93. Siemens Aktiengesellschaft. Decoupling A High-Frequency Error Signal from a high frequency electromagnetic field in a liquid-cooled large Electric Machine.

572/Cal/93. Siemens Aktiengesellschaft. Process and Equipment for purifying flammable gas.

**ALTERATION OF DATE UNDER SECTION-16**

Patent No. 172703  
(990/M/90)  
Ante-dated to 2nd April 1987.

Patent No. 172704.  
(79/M/91)  
Ante-dated to 12th May 1989.

Patent No. 172705.  
(105/M/91)  
Ante-dated to 12th May 1987.

Patent No. 172706.  
(106/M/91)  
Ante-dated to 12th May 1987.

Patent No. 172707.  
(107/M/91)  
Ante-dated to 12th May 1987.

Patent No. 172708.  
(258/M/91)  
Ante-dated to 27th August 1987.

Patent No. 172710.  
(472/M/91)  
Ante-dated to 16th October 1987.

Patent No. 172709.  
(449/M/91)  
Ante-dated to 15th October 1987.

**COMPLETE SPECIFICATION ACCEPTED**

Notice is hereby given that any person interested in opposing the grant of patents on any of the Applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, given notice to the Controller of Patents at the appropriate office on the prescribed Form 15, of such opposition. The written statement of opposition should be filed alongwith the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

The classifications given below in respect of each specification are according to Indian Classification and International Classification.

Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta or the appropriate Branch Office on payment of the prescribed copying charges which may be ascertained on application to that office. Photo copying charges may be calculated by adding the number of pages in the specification and drawing sheets mentioned below against each accepted specification and multiplying the same by two to get the charges as the copying charges per page are Rs. 2/-.

**स्वीकृत सम्पूर्ण विनिदेश**

एनदब्ल्यूआरा यह सूचना दी जाती है कि सम्बद्ध आवेदनों में से किसी पर पेटेंट अनुबान का विरोध करने के इच्छुक कोई व्यक्ति, इसके निर्गम की तिथि से चार (4) महीने मा अधिक एसी व्यवधि जो उक्त 4 महीने की अवधि की समाप्ति के पूर्व पेटेंट नियम, 1972 के तहत विहित प्रपत्र 14 पर आवेदित एक महीने की अवधि से अधिक न हो, के भीतर कभी भी नियंत्रक, एकस्थ की उपयुक्त कार्यालय को एसे विरोध की सूचना विहित प्रपत्र 15 पर दे सकते हैं। विरोध सम्बन्धी लिपित व्यवस्था, उक्त सूचना के साथ अधिक पेटेंट नियम, 1972 के नियम 36 में यथा विहित इसकी नियम के एक महीने के भीतर ही फाइल किए जाने चाहिए।

“प्रत्येक विनिदेश के संबंध में नीचे दिए वर्गीकरण, भारतीय वर्गीकरण तथा अन्तरराष्ट्रीय वर्गीकरण के अनुरूप हैं।”

स्पष्टक्रिया (चित्र आरेखों) की फोटो प्रसिद्ध यदि कोई हो, के माथ विनिदेशों की टाईक्रिया अथवा फोटो प्रसिद्धों की बायां-पेटेंट कार्यालय, कलकत्ता अथवा उपयुक्त शास्त्र कार्यालय द्वारा विहित लिप्यान्तरण प्रभार जिसे उक्त कार्यालय से पत्र-व्यवहार द्वारा सुनिश्चित करने के उपरांत उसकी अदायगी पर की जा सकती है। विनिदेश की पृष्ठ संख्या के साथ प्रत्येक स्वीकृत विनिदेश के सामने नीचे वर्णित चित्र आरेख कागजों के जोड़कर उसे 2 में गुणा करके (व्यांकिक प्रस्थेक पृष्ठ की लिप्यान्तरण प्रभार 2/- रु. है) फोटो लिप्यान्तरण प्रभार का परिकलन किया जा सकता है।

Ind. Cl. : 121—[GROUP—LXIII(2)]

172701

2 Claims

Int. Cl. : C 09 K 11/06.

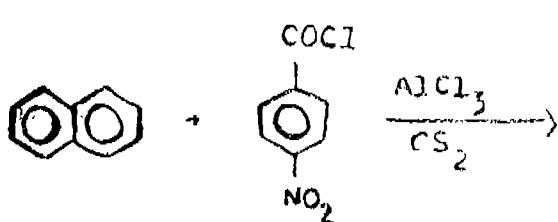
## PROCESS FOR PREPARING A PHOSPHORESCENCE ACTIVATOR.

Applicant: THE POST OFFICE, A BRITISH CORPORATION INCORPORATED BY STATUTE OF POSTAL HEADQUARTERS 33, GROSVENOR PLACE, LONDON SW1X 1PX, ENGLAND.

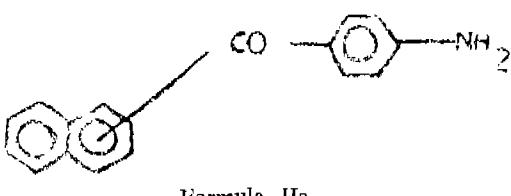
Inventors: (1) DAVID CYRIL POWELL, & (2) AUBREY DOUGLAS WALKER.

Application No. 78/MAS/88 filed February 9, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

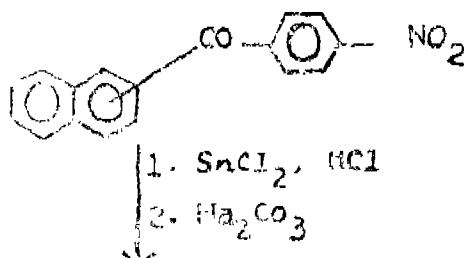


A process for preparing a phosphorescence activator of the formula IIa of the accompanying drawings



Formula IIa

comprising reacting naphthalene with p-nitrobenzoyl halide in the presence of an inert solvent such as carbon disulphide and aluminium chloride catalyst, to produce a compound of the formula III of the accompanying drawings.



Formula III

reducing the said compound of the formula III in the presence of stannous chloride and hydrochloric acid to obtain

the compound of formula IIa, recovering the same, in a known manner.

(Comp. 19 pages;

Drwgs. 4 sheets)

Ind. Cl. : 40 B [IV(1)]

172702

Int. Cl. : B 01 J 23/86, C 07 C 29/136.

## A PROCESS FOR PRODUCING A HYDROGENATION CATALYST.

Applicants: DAVY MCKEE (LONDON) LIMITED, A BRITISH COMPANY OF 250 EUSTON ROAD, LONDON, NW1 2 PG, ENGLAND, A BRITISH COMPANY.

Inventors: KEITH TURNER, MOHAMMAD SHARIF, JOHN SCARLETT, ANTHONY BENJAMIN CARTER & GOEFFREY WEBB.

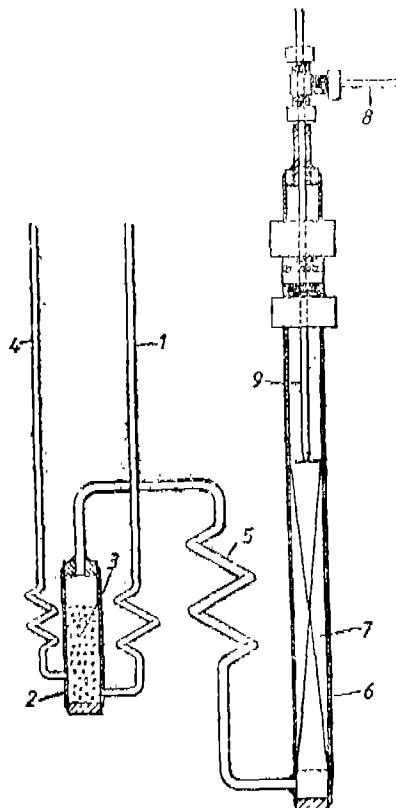
Application No. 542/MAS/88 filed on 28th July 1988.

Convention dated: 29th July 1987; No. 8717989 (U.K.).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

9 Claims

A process for producing a hydrogenation catalyst having a reduced copper chromite with a Cu: Cr atomic ratio of 0.6: 1 to 2.75: 1 comprises subjecting the copper chromite catalyst to a pre-reduction treatment by heating in a reducing atmosphere at a temperature in the range of 100°C to 450°C wherein prior to said pre-reduction treatment, the copper chromite is subjected to an ante-pre-reduction treatment by soaking it in a reducing gas atmosphere such as herein described at a temperature below the said pre-reduction temperature.



(Comp. Specn. 42 pages;

Drwg 5 sheets)

Ind. Cl. : 22—[GROUP—XI(2)]

172703

Int. Cl. 4 : G 01 D 7/00.

G 01 N 21/01.

## AN APPARATUS FOR READING A CODE ON A MOLDED CONTAINER.

Applicant : OWENS-BROCKWAY GLASS CONTAINER INC. A CORPORATION ORGANIZED UNDER THE LAWS OF THE STATE OF DELAWARE, USA OF ONE SEAGATE, TOLEDO, OHIO 43666, U.S.A.

Inventor : JOHN WILLIAM JUVINALL.

Application No. 990/Mas/90 filed December 7, 1990.

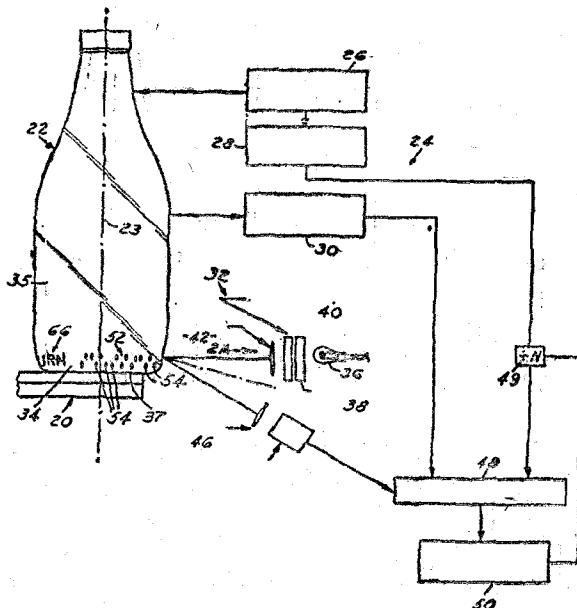
Divisional to Patent No. 169346 (238/Mas/87);

Ante-dated to April 2, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 5 Claims

An apparatus for reading a code on a molded container indicative of mold of origin, said container comprising side and end walls, a container axis, and a container heel at the junction of said side and end walls, said code comprising a plurality of discrete protrusions projecting outwardly of said side wall at said heel and extending in a linear array along said heel, said apparatus comprising a source of diffused light energy having a widthwise dimension across said source and an intensity gradient which varies across said dimension, means for moving said container heel in the direction of said dimension across said source, a camera positioned on the side wall, said camera being so oriented with respect to said source and said moving means that said field of view is reflected by said heel onto said source, whereby passage of a said protrusion through said field of view alters reflection of said field of view with respect to said dimension across said source, and means for reading said code as a function of said reflection alterations.



(Com. 23 pages;

Drwgs. 5 sheets)

Ind. Class : 55-D.2 - [GROUP - XIX(1)]

172704

Int. Cl. 4 : A 01 N 59/26

## A METHOD OF MAKING A PHOSPHINE APPLICATOR.

Applicant : DEGESCH GMBH, A GERMAN COMPANY OF 28-40 WEIMULLERSTRASSE, 6000 FRANKFURT, FEDERAL REPUBLIC OF GERMANY.

Inventors : (1) WOLFGANG KAPP  
(2) ALFONS MOOG

Application No. 79/Mas/91 filed February 1, 1991.

Divisional to Patent Application No. 380/Mas/89; Ante-dated to May 12, 1989.

Convention date : May 14, 1988; (No. 8811476.4; Great Britain)

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 8 Claims

A method of making a phosphine applicator to effect delayed and sustained release of phosphine comprising the steps of making at least one receptacle wherein at least two gas and humidity permeable layers having the inner space thereof coated with porous bonding materials such as ethylene vinyl acetate, the said receptacle containing a hydrolysable composition consisting of a metal phosphide and a zeolite having a pore width of 0.3 upwards, the said hydrolysable metal phosphide is devoid of ammonia releasing components.

Com.-35 pages;

Drwgs.-1 sheet)

Ind. Class - 154-F - [GROUP - XXXVII(1)]

172705

Int. Cl. 4 : B 41 F 31/00; 13/00

## A WEB-FED PERFECTING PRINTING APPARATUS

Applicant : STRACHAN HENSHAW MACHINERY LIMITED, OF SPEEDWELL, BRISTOL, BS5 7UZ, UNITED KINGDOM, A BRITISH COMPANY.

Inventors : (1) ALBERT BOWMAN  
(2) ROGER FREDERICK MASLIN  
(3) DAVID GODDEN  
(4) JONATHAN HEATH RIPPER

Application No. 105/Mas/91 filed February 8, 1991.

Divisional to Patent Application No. 345/Mas/87; Ante-dated to May 12, 1987.

Convention date : May 14, 1986; (No. 8611722; United Kingdom)

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 10 Claims

A web-fed perfecting printing apparatus comprising an array of cartridges for printing on a web fed through each cartridge of the array, each cartridge comprising at least a pair of adjacent printing cylinders, and each cylinder of the cartridge being adapted to apply printing medium to the respective surface of a web passing therebetween; printing supplying means for supplying printing medium to both printing cylinders of a selected cartridge; plurality of units for containing the said printing medium; and means for effecting mutual repositioning of the cartridges with respect to the printing medium; supplying means to effect the selection of a particular cartridge.

(Com. - 27 pages;

Drwgs. - 7 sheets)

Ind. Class - 154-F - [GROUP - XXXVII(1)]

172706

Int. Cl. 4 : B 41 F 13/00; 31/00

## A WEB-FED PRINTING APPARATUS.

Applicant : STRACHAN HENSHAW MACHINERY LIMITED, OF SPEEDWELL, BRISTOL, BS5 7UZ, UNITED KINGDOM, A BRITISH COMPANY.

Inventors : (1) KENNETH ALBERT BOWAN  
(2) ROGER FREDERICK MASLIN  
(3) DAVID GODDEN  
(4) JONATHAN HEATH RIPPER

Application No. 106/Mas 91 filed February 8, 1991.

Divisional to Patent Application No. 345/Mas/87; Ante-dated to May 12, 1987.

Convention date : May 14, 1986; (No. 8611722; United Kingdom).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

### 11 Claims

A web-fed printing apparatus comprising a plurality of cartridges in an array for printing a web feedable through each cartridge of the array, each cartridge having transferring means for transferring a printing medium from at least one unit containing said printing medium to the web, the said transferring means having at least one printing cylinder which is adapted to contact the web, the said printing cylinder of one of the cartridges has a circumference different from that of the printing cylinder of at least one of the other cartridges for providing printing of different print repeat lengths, and the web is printed by at least some of the cartridges having the different sized cylinders being simultaneously present in the apparatus during that printing.

(Com.-27 pages; Drwgs. - 7 sheets)

Ind. Class - 154-F-[GROUP - XXXVII(1)] 172707

Int. Cl. - B 41 F 15/00; 31/00.

### A METHOD AND APPARATUS FOR MANUFACTURING A PROCESSED WEB OF MATERIAL

Applicant : STRACHAN HENSHAW MACHINERY LIMITED, OF SPEEDWELL, BRISTOL BS5 7UZ, UNITED KINGDOM, A BRITISH COMPANY.

Inventors : (1) KENNETH ALBERT BOWMAN  
(2) ROGER FREDERICK MASLIN  
(3) DAVID GODDEN  
(4) JONATHAN HEATH RIPPER

Application No. 107/Mas/91 filed February 8, 1991.

Divisional to Patent Application No. 345/Mas/87; Ante-dated to May 12, 1987.

Convention date : May 14, 1986; (No. 8611722; United Kingdom).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

### 13 Claims

A method of manufacturing a processed web of material comprising the steps of printing on the said web; cutting the printed web in timed relationship with the printing into a plurality of separate sheets; "folding each sheet" by a folder whose action is timed in dependence on the arrival of the sheet at the folder and independent of the action of printing on the said web; and there is continuous movement of the material from prior to the printing to the commencement of the folding of the sheets.

(Com. - 16 pages; Drwgs. - 3 sheets)

Ind. Classes 39-M & 170-B [GROUPS-III & XLVIII(40)] 172708

Int. Cl. - C 11 D 3/06  
C 01 B 25/30

### "A METHOD FOR THE PREPARATION OF A PARTICULATE CRYSTALLINE, SODIUM TRIPOLYPHOSPHATE COMPOSITION"

Applicant MONSANTO COMPANY, A DELEWARE CORPORATION, OF 800 NORTH LINDBERGH BOULEVARD, ST. LOUIS, MISSOURI 63167, U.S.A. .

Inventor : LOUIS ALBERT HIGHFILL

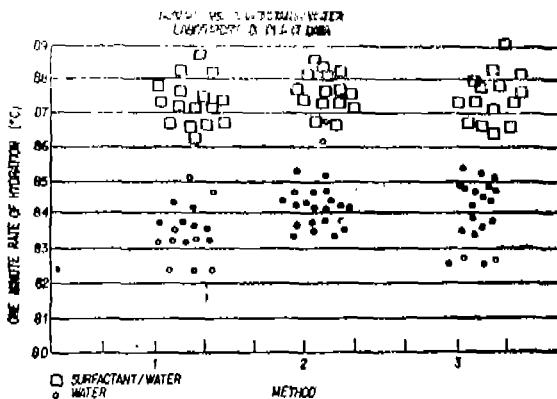
Application No. 258/Mas/91 filed April 1, 1991.

Divisional to Patent No. 170065 (624/Mas/87); Ante-dated to August 27, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

### 3 Claims

A method for the preparation of a particulate, crystalline, sodium tripolyphosphate composition, comprising contacting crystalline sodium tripolyphosphate containing less than 0.1% water with an aqueous solution of surfactant to produce a particulate, crystalline, sodium tripolyphosphate composition comprising between 0.1% by weight and 23% by weight water in the form of water of hydration and between 0.2 ppm and 125 ppm of the surfactant.



(Com. - 30 pages; Drwgs. - 3 sheets)

Ind. Class - 172-C<sub>5</sub> - [GROUP - XX] 172709

Int. Cl. - C 01 H 5/32; 5/38

### AN APPARATUS FOR AUTOMATICALLY COMPENSATING DENSITY VARIATIONS OF FIBER MATERIAL IN A TEXTILE MACHINE

Applicant : MASCHINENFABRIK RIETER AG., A BODY CORPORATE ORGANISED UNDER THE LAWS OF SWITZERLAND, OF WINTERTHUR, SWITZERLAND.

Inventors : (1) PAUL STAHEL  
(2) ROBERT DEMUTH  
(3) FRITZSCHE PETER

Application No. 449/Mas/91 filed June 11, 1991.

Divisional to Patent Application No. 741/Mas/87; Ante-dated to October 15, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

### 2 Claims

An apparatus for automatically compensating density variations of fiber material in a textile machine, comprising fiber infeed means for receiving a mass of fiber material whose density variations are to be detected; said fiber infeed means having at least one driven feed roll element for feeding the mass of fiber material to the said textile machine and at least one fiber infeed element; said driven fiber feed roll element forming in conjunction with said fiber infeed element an invariable size nipping zone forming a passage for the fiber material, open loop means coacting with the said fiber infeed means for generating measuring signals representative of density variations of the throughpassing mass of fiber material in the nipping zone; closed loop means for generating signals representative of density variations of fiber material processed in the textile machine at a delivery end of said textile machine; control means for processing at least the generated signal representative of the density variations of the throughpassing mass of fiber material in the nipping zone and the generated signal representative of density variations of the processed fiber material at the delivery end of the textile machine to obtain control signals for controlling the rotational speed of the driven fiber feed roll element to produce

at the delivery end of the textile machine processed fiber material of uniform density; characterized in that means defining an abutment is provided, one of said elements of the fiber infeed means being positioned for bearing against said abutment when moved into contacting relationship during operation of the fiber infeed means, said closed loop means for generating signals representative of a force generated by one of said elements bearing against said abutment, thereby detecting said density variations of the mass of the fiber material passing through said nipping zone; said open loop means for generating said measuring signals comprising at least one force measuring unit having at least one force measuring cell operatively coacting with said means defining said abutment and determining forces generated in the nipping zone by the action of the mass of fiber material therein; the said determined forces being generated at said means defining said abutment and thereby to the said force measuring cell for generating electrical measuring signals representative of the density variations of the throughpassing mass of the fiber material in the nipping zone.

(Com.—34 pages;

Drawings. - 17 sheets)

Ind. Class - 98-E - [GROUP - VII(2)]

172710

Int. Cl. - F 25 B 29/00

## A THERMALLY DRIVEN GAS RESONANCE DEVICE

Applicant : THE HASER COMPANY LIMITED, A BRITISH COMPANY, OF MORAY HOUSE, 16 BANK STREET INVERNESS, SCOTLAND, IV1 1QY, GREAT BRITAIN.

Inventor : ALAN ARTHUR WELLS

Application No. 472/Mas/91 filed June 19, 1991.

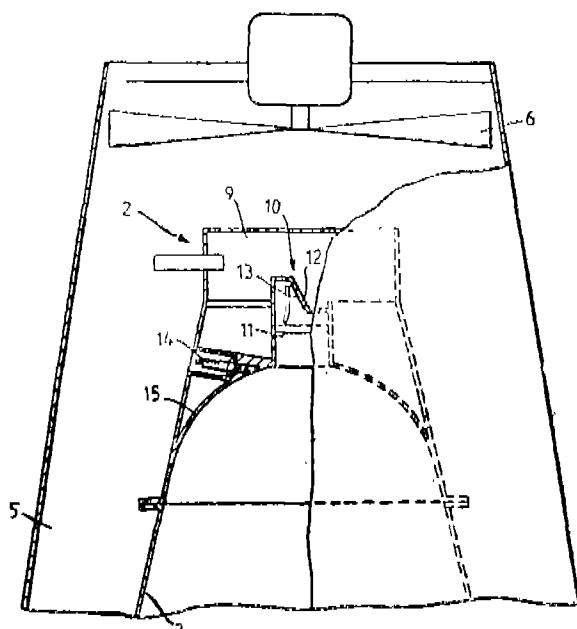
Convention date : November 6, 1986; (No. 8626562; Great Britain)

Divisional to Patent Application No. 746/Mas/87; Antedated to October 16, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

## 8 Claims

A thermally driven gas resonance device comprising a resonance tube (3) having increasing cross-section along its length from one end to the other, a heat source (2) located at the one end of the resonance tube (3), and triggering means (2, 4) to trigger oscillations in a gas in the resonance tube (3) wherein the said resonance tube has a frustoconical shape in longitudinal section with sidewalls that are bowed outwards



Drawings. - 6 sheets)

(Com. - 29 pages;

Cl. 32 E, 152 E, 136 E.

172711.

Int. Cl. - B 29 B 15/00, B 29 C 47/00.

C 08 L 23 00, 25/00, 27/00, 31/00, 33/00.

B 29 K 23/00, 25/00, 27/00, 29, 00, 31/00, 33/00, 77 00.

## "POLYMER COMPOSITION WITH SUBSTANTIALLY IMPROVED EXTRUSION CHARACTERISTICS".

Applicant : E. I. DU PONT DE NEMOURS AND COMPANY, OF WILMINGTON, DELAWARE, UNITED STATES OF AMERICA.

Inventors : (1) GEORGE RICHARD CHAPMAN JR.  
(2) DONNAN EDWIN PRIESTER.  
(3) CHARLES WINFIELD STEWART.  
(4) ROBERT EDWARD TARNEY.

Application No. 529/Cal/89; filed on 5th October, 1990.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

5 claims.

A polymer composition with substantially improved extrusion characteristics comprising one or more difluoro-melt-processible polymer such as herein described and 0.002-0.5 wt% of one or more fluoropolymer extrusion process aid characterised in that the extrusion process aid :

- (a) has a fluorine to carbon ratio of at least 1:1.5
- (b) has polymer chain ends bearing a functional group, W, wherein W is selected from -COF, -SO<sub>3</sub>M, -OSO<sub>3</sub>M and -COOM, wherein M is hydrogen, a metal cation or a quaternary ammonium cation,
- (c) is selected from the group consisting of
  - (i) an irradiated polytetrafluoroethylene,
  - (ii) a partially crystalline copolymer of tetrafluoroethylene and a perfluoro (alkyl vinyl ether) or a perfluoroolefin containing 3-8 carbon atoms,
  - (iii) an elastomeric copolymer of tetrafluoroethylene and a perfluoro (alkyl vinyl ether),
  - (iv) a copolymer of vinylidene fluoride, hexafluoropropylene and tetrafluoroethylene, and
  - (v) a copolymer of tetrafluoroethylene and 0.5-40 mole % of a functional-group-containing monomer



wherein Z is -F or -CF, x is 0 or an integer of 1-4, y is 0 or 1, z is an integer of 1-12, and W is selected from -SO<sub>2</sub>F, -SO<sub>2</sub>Cl, -SO<sub>2</sub>H, -COOR or -COOM, wherein R is C1-3 alkyl and M is hydrogen, a metal cation, or a quaternary ammonium cation, and

- (d) contains at least 100 functional groups W per million carbon atoms.

(Compl. specn. 73 pages;

Drawings. 11 sheets)

(Provn. Specn. 30 pages;

Drawings. 17 sheets)

Cl. : 170 B + D

172712

Int. Cl. - C 11 D 3/08.

## A PROCESS OF PRODUCTION OF A LIQUID DETERGENT COMPOSITION CONTAINING ZEOLITE A AS A BUILDER.

Applicant : DEGUSSA AKTIENGESELLSCHAFT, OF 6000 FRANKFURT AM MAIN, WEISSFRAUENSTRASSE 9, FEDERAL REPUBLIC OF GERMANY.

Inventors: (1) BEATA-MARIA SAX, (2) WOLFGANG LEONHARDT, (3) AKOS KISS, (4) WOLFGANG LORTZ, (5) WOLFGANG ROEBKE, (6) CLAUS DIERTRICH.

Application No. 551/Cal/89; filed on 12th July, 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

2 Claims

A process of production of a liquid detergent composition containing zeolite A as a builder, wherein a conventional liquid detergent is mixed with a zeolite A powder, the amount of the zeolite A powder being from 15 to 35% by wt. of the composition characterized in that the said zeolite A powder is and having an average particle size having 50% point of the distribution in the range of 1.8 to 3.2  $\mu\text{m}$  measured with a cilias granulometer 715 to result in a liquid detergent composition having stability during storage and use.

(Compl. specn. 10 ppages

flDrgs. 11 sheets)

Cl. : 128 G, 143 D. 3

172713

Int. Cl. : B 65 D 85/56.

A METHOD OF THERMALLY INSULATED CONTAINER PACKING.

Application : THERMOPAC AB, OF INDUSTRICENTRA, 97200 GALLIVARE, SWEDEN.

Inventors : (1) LARS-ERIK LEJONDAHL, (2) CURT B JORK, (3) BJORN G. KARLSSON.

Application No. 628/Cal/89; filed on 02nd August, 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

9 Claims

A method of thermally insulated container packing for storing and transporting material such as vaccine, biological material and the like requiring a substantial constant temperature during a time of several months, comprising the steps of :

filling a first can-shaped vessel (2) with a solid-to liquid phase transforming refrigerant material (5) and placing the material (4) to be cooled in said first vessel (2) so that said phase transforming material surrounds said material to be cooled on all sides;

hermetically sealing said first vessel (2) preferably through welding;

arranging a multi-layer insulation comprising layers of porous material (8) under vacuum alternating with layers of a heat reflecting material (9) about said first vessel (2), so that it encloses said first vessel on all sides;

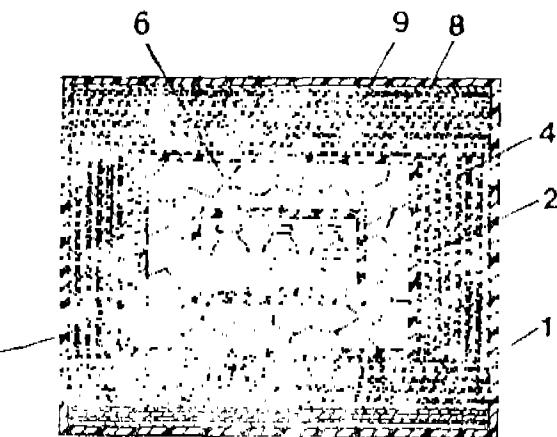
placing said insulated first vessel in a second can shaped vessel (1);

hermetically sealing said second vessel (1) preferably through welding;

the arranging of said insulating, the placing of said insulated first vessel in a second vessel and the hermetic sealing of said second vessel being performed under a substantial vacuum, so that the space between the inner first vessel and the outer second vessel will be substantially free from air, and avoiding any structural connections extending between

said inner and outer casings so that any thermal bridges therebetween are effectively prevented.

FIG. 1



(Compl. specn. 15 pages

Drgs. 6 sheets)

Cl. : 29 C

172714

Int. Cl. : G 06 M 7/10.

A CARD COUNTER APPARATUS.

Applicant : DYNETICS ENGINEERING CORPORATION, OF 515 BOND STREET LINCOLNSHIRE, ILLINOIS 60069-4209, UNITED STATES OF AMERICA.

Inventor : JAMES E. HILL.

Application No. 723/Cal/89; filed on 01st September, 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

11 Claims

A card counter apparatus comprising a device for counting cards, apparatus for storing the number of cards actually counted, a comparator device for comparing the number of cards actually counted with a preset number, and a preset memory system, comprising a preset memory device for recording said preselected number and a preset data entry system connected to the said card counting apparatus for selectively entering the number of cards actually counted into said preset memory device as the preset number.

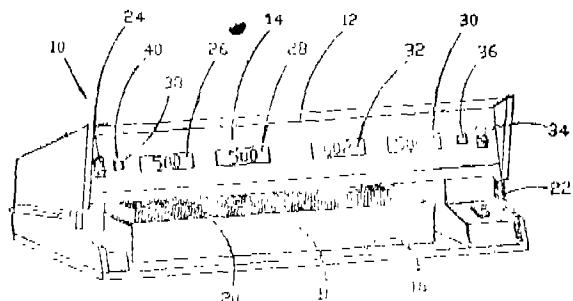


FIG. 1

(Compl. specn. 30 pages

Drgs. 11 sheets)

Cl. : 125 B, 37 B

172713

8 Claims

Int. Cl. : F 28 C 1/00, F 28 D 1/00;  
F 28 G 1/00.

## AN IMPROVED APPARATUS FOR LIQUID FLOW DISTRIBUTION FOR A PROCESS LIQUID.

Applicant : GLITSCH, INC. OF 4800 SINGLETON BOULEVARD, DALLAS, TEXAS 75212, UNITED STATES OF AMERICA.

Inventors : (1) MICHAEL JAN BINKLEY, (2) PAOLO MARTINENGHI, (3) TULLIO PETRICH.

Application No. 765/Cal/89; filed on 18th September, 1989.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 19 Claims

An improved apparatus for liquid flow distribution for a process column of the type wherein said apparatus is positioned above a packing section for the distribution of liquid downwardly therethrough, said improvement comprising :

a plurality of troughs;

said troughs being formed with opposite side wall body sections, each of said body sections having holes formed therein for spewing liquid outwardly therefrom;

a plurality of distributor tubes disposed outwardly of said body section of said troughs, each of said tubes being in flow communication with at least one of said holes formed therein for receiving the spew of liquid therefrom.

at least some of said tubes being constructed with a first generally U-shaped channel affixed to said side wall of said trough and a channel generally V-shaped channel removably received therein for permitting access to said holes; and

said tubes depending below the bottom region of said trough for discharging liquid downwardly therefrom.

Compl. specn. 26 pages

Drgs. 3 sheets

An improved process for obtaining stack gases having pollutants within permissible limits in a conventional nitric acid plant, which comprises subjecting the tail gases obtained in a conventional nitric acid plant to a step of scrubbing of the gases in contact with aqueous sodium hydroxide solution for the absorption of pollutants, mainly nitric oxide and nitrogen dioxide characterized in that the said tail gases are pre-conditioned either,

- (i) by mixing it with nitric oxide rich gas from nitric acid plant after oxidation and/or
- (ii) by employing oxygen in such amounts as to provide a mixed preconditioned gas having nitric oxide and nitrogen dioxide in a molar ratio of 1 : 1 is contacted in a first scrubbing stage with an aqueous alkaline solution preferably sodium hydroxide having not more than 0.30 mole of free hydroxyl ions per 100 moles of water in a counter-current fashion and thereafter subjecting the gases leaving the first scrubbing stage to absorption in a second scrubbing stage using sodium hydroxide solution having not more than 3.5 moles of free alkali but not less than 2.5 moles of free alkali per 100 moles of water thereafter, allowing the gases leaving the second scrubbing stage into the stack for venting to the atmosphere, the pollutant laden solution leaving the second stage being recycled if necessary, and the final solution obtained in the second stage being admitted as the feed solution for the first scrubbing stage, the final solution obtained from the first scrubbing stage being used for recovery of any available useful chemicals obtained from the absorption of the pollutants or being sent for consumption in process industries.

Compl. specn. 13 pages

Drg. Nil.

Cl. : 40 H + 88 F

172716

Int. Cl. : B 01 D 47/00, 53/14, 53/34.

## AN IMPROVED PROCESS FOR OBTAINING STACK GASES HAVING POLLUTANTS WITHIN PERMISSIBLE LIMITS IN A CONVENTIONAL NITRIC ACID PLANT.

Applicant : PROJECTS &amp; DEVELOPMENT INDIA LIMITED OF P.O. SINDRI PIN-828122, DHANBAD, BIHAR, INDIA.

Inventors : (1) VIRENDRA PRATAP SING, (2) GYANENDRA RAI BHATNAGAR, (3) JAGDISH PRASAD, (4) RAMESH CHANDRA SAXENA, (5) DR. KRISHNA MOHAN VERMA.

Application No. 973/Cal/89; filed on 23rd November, 1989.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

Cl. : 33-A

172717

Int. Cl. : B 22 D 11/00, 11/04.

## A STIRRING DEVICE IN A CONTINUOUS CASTING PLANT FOR STIRRING A MOLTEN CASTING SUMP IN THE REGION OF THE MOULD OUTLET.

Applicant : CONCAST STANDARD AG. OF TODI-STRASSE 7, 8027 ZURICH/SWITZERLAND.

Inventor : MARKUS SCHMID.

Application No. 1052/Cal/89; filed on 20 December, 1989.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 17 Claims

A stirring device in a continuous casting plant for stirring a molten casting sump in the region of the mould outlet, said stirring device (10) adjoining a mould cavity (11) of an oscillating mould (2), characterized in that said stirring device (10) which oscillates together with the mould (2) and which is immediately following the cooled mould cavity (11) of the mould (2) is fixed on the mould table (8) independently of the mould (2).

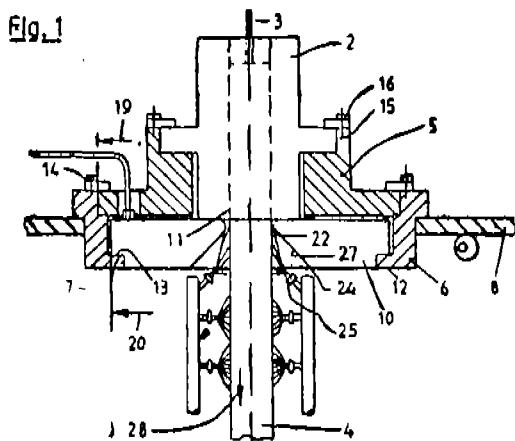
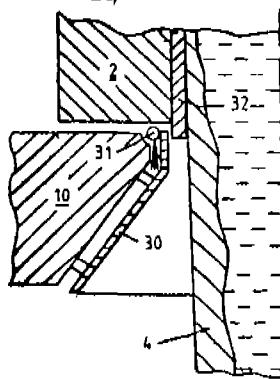


Fig. 2



Compl. specn. 10 pages

Drgs. 1 sheet

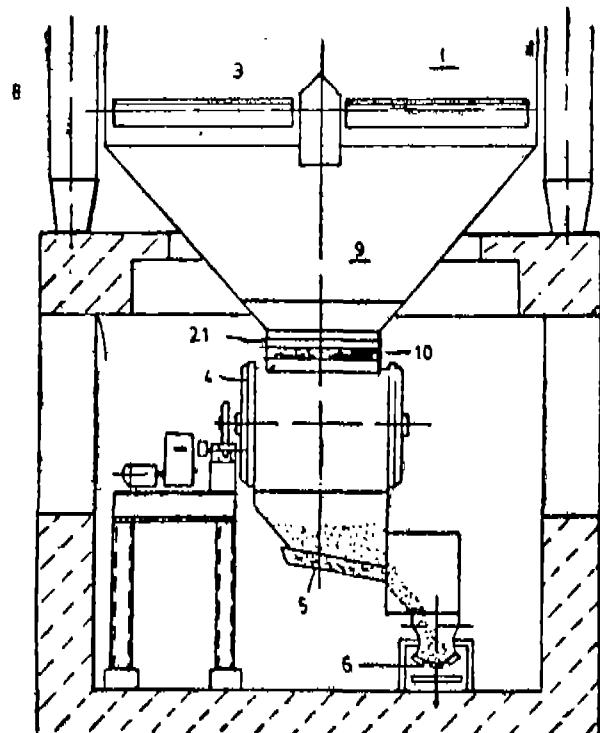


FIG. 2.

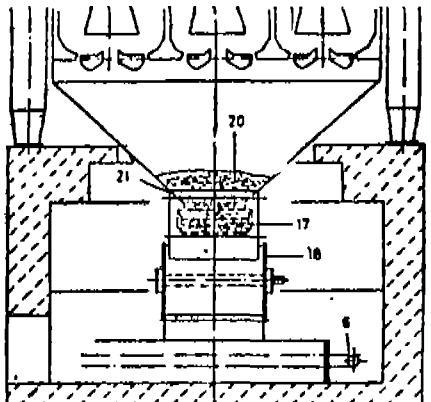


Fig. 4

Compl. specn. 12 pages

Drgs. 2 sheets

Cl. : 47-C

172718

Int. Cl. : C 10 B 33/00, 39/02.

**PROCESS FOR PRODUCING DRY-QUENCHED COKE  
IN A COKE COOLING SHAFT AND A DEVICE FOR  
THE IMPLEMENTATION OF THE PROCESS.**

Applicant : OTTO INDIA LIMITED OF F/16, SECTOR-2, ROURKELA-769006, ORISSA, INDIA, AND STILL OTTO GMBH, OF CHRIST STRASSE 9, 4630 BOCHUM 1, WEST GERMANY.

Inventors : (1) DR.-ING. GERD NASHAN, (2) DR.-ING. WILHELM STEWEN, (3) HORST DUNGS, (4) WILLI BRINKMANN, (5) ROBERT HOFFMANN, (6) WILLI KISSMANN, (7) MANFRED RUDEL.

Application No. 249/Cal/90; filed on 27th March, 1990.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

**11 Claims**

A process for producing dry-quenched coke in a coke cooling shaft provided with means for discharging the same first from the coke cooling shaft intermittently or in batches via non-gastight discharge systems, preferably by operating swing discharge units uniformly arranged over the cooling shaft cross-section and then from the gastight system characterized in that the intermittently withdrawn coke from the coke cooling shaft is discharged via a cellular-wheel lock providing a gastight closure, preferably via a drum-type lock equipped with two lock compartments.

Cl. : 128 A

172719

Int. Cl. : A 61 L, 15/01, 15/03, 15/04.

**NEW BIOMATERIAL MEMBRANES AND PROCESS  
FOR THEIR PREPARATION**

Applicant : FIDIA S.P.A. OF VIA PONTE DELLA FABBRICA, 3/A, 35031 ABANO TERME, (PROV. PADOVA), ITALY.

Inventors : (1) FRANCESCO DELLA VALLE, (2) GARRIELLA CALDERINI, (3) ALESSANDRO RASTRELLI, (4) AURELIO ROMEO.

Application No. 412/Cal/91; filed on 31st May, 1991.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 10 Claims

Biocompatible membranes consisting of materials of natural, synthetic or semisynthetic origin as herein described, and having a thickness of between 10 and 500  $\mu$ , and preferably between 20 and 40  $\mu$ , characterised by comprising an ordered series of holes of a defined and constant size between 10 and 1000  $\mu$ , separated from each other by a constant distance of between 50 and 1000  $\mu$ .

Compl. specn. 14 pages

Drgs. 5 sheets

Cl. : 77 B2 D; 140 B3

172720

Int. Cl. : A 23 D 5/02).

## PROCESS FOR PRODUCING REFINED VEGETABLE AND ANIMAL OIL.

Applicant : METALLGESCHAFT AKTIENGESELLSCHAFT, OF REUTERWEG 14, W-6000 FRANKFURT AM MAIN, FEDERAL REPUBLIC OF GERMANY.

AND

ROHM GMBH, OF KIRSCHENALLEE, W-6100 DARMSTADT, GERMANY.

Inventors : (1) GEORG PANK, (2) ERIK AALRUST, (3) WOLFGANG BEYER, (4) HERMANN PLAINER, (5) ROLAND REINER, (6) HANS OTTOFRICK.

Application No. 679/Cal/91; filed on 09th September, 1991.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 14 Claims

A process for producing refined vegetable or animal oil by pretreating the raw oil to remove mucilage, characterised in that the pretreated oil is stirred with an aqueous solution such as herein described to form an emulsion, said aqueous solution containing at least one of the phospholipases A<sub>1</sub>, A<sub>2</sub> or B known per se, and an aqueous phase is separated from the refined oil product being substantially free of phosphor containing components.

Compl. specn. 15 pages

Drg. Nil

Ind. Cl. : 94 H [XXXIII(4)]

172721

Int. Cl. : B 02 C 4/00, 25/00.

## A TOOL FOR CHANGING A WORK ROLL MOUNTED ON A SHAFT OF A ROLLING MILL.

Applicant(s) : MORGAN CONSTRUCTION COMPANY, A MASSACHUSETTS CORPORATION OF 15 BELMONT STREET, WORCESTER, MA 01605, U.S.A.

Inventor(s) : ROBERT SHEPART HOWARD, and CAMILLE SAADALLAH NASRAH.

Application for Patent No. 561/Del/88 filed on 01 July 1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch New Delhi-110 005.

## 6 Claims

A tool for changing a work roll (10) mounted on a shaft (12) of a rolling mill by axially shifting a sleeve (14) into and out of wedged engagement between said roll (10) and said shaft (12), said tool comprising :

a circumferentially spaced apart first lugs (16) extending radially outwardly from said sleeve (14);

a cylinder (18) having a closed end and an open end, circumferentially spaced second lugs (24) extending radially inwardly from said open end of said cylinder (18);

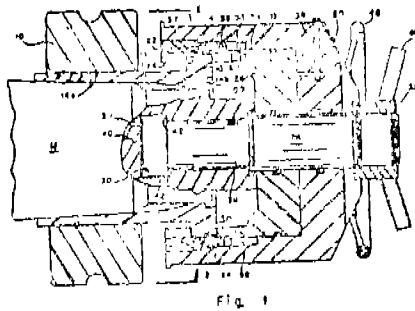
a piston (26) disposed within said cylinder (18) and being axially shiftable in relation to said cylinder;

a stem (28) extending axially through said piston (26) and said cylinder (18) and being axially shiftable in opposite directions in relation to said piston (26) and said cylinder (18) stop (30) means located on said stem (28) for limiting the axial shifting of said cylinder (18) in one direction relative to said stem (28), said cylinder (18) and said stem (28) being relatively rotatable;

connecting (38) means detachably connecting said stem (28) to said shaft (12), with said stem (28) and said shaft (12) being in axial alignment, and with said first lugs (16) being located in an axial plane located between said second lugs (24) and said piston (26);

rotating (48) means connected to said cylinder (18) for rotating said cylinder (18) in relation to the thus connected stem (28) between a first position where the sleeve (14) is removed and said second (24) lugs are aligned in an interlocked relationship with said first lugs (16), and a second position where sleeve is inserted and said second lugs (24) are aligned with the spaces between said first lugs (16); and

means (58) for introducing a pressurized fluid medium between said piston (26) and the closed end of said cylinder (18), so that when said cylinder (18) is in said first position, said piston (26) is urged in one direction against the shaft (12) end and said cylinder (18) is urged in the opposite direction to disengage the sleeve (14) from between the roll (10) and shaft (12), and when said cylinder (18) is in said second position, said cylinder (18) is urged in one direction against said stop (38) and said piston (26) is urged in the opposite direction against said first (16) lugs to axially force said sleeve (14) into wedged engagement between said roll (10) and said shaft (12).



(Compl. specn. 13 pages)

Drgs. 2 sheets)

Ind. Cl. : 69Q [I.IX(1)]

172722

Int. Cl. : H 01 H 61/02.

## OVERLOAD THERMAL RELAY.

Applicant : LA TELEMÉCANIQUE ÉLECTRIQUE, A FRENCH CORPORATION, OF 33 BIS, AVENUE DU MARECHAL JOFFRE, 92000 NANTERRE, FRANCE.

Inventor(s) : GRUNO JACUET.

Application for Patent No. 562/Del/88 filed on 01 July 1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 5 Claims

An overload thermal relay comprising :

- (i) a case (2) having a first partition wall (45) defining first and second cavities (23, 3), the second cavity (3) having a further partition wall (47) at right angles to the first partition wall (45);
- (ii) a plurality of bi-metallic inductive strips (4, 6, 8) housed in said first cavity (23);
- (iii) a first break switch (28) having a first movable contact support member (39) which has a first pivoting point (30) and a first actuating point (32), and a first pair of terminals (35, 36) said break switch (28) having a first operating mode with automatic reset and a second operating mode with manual reset;
- (iv) a second switch (27) having a second movable contact support member (37) which has a second pivoting point (29) and a second actuating point (31) and second pair of terminals (33, 34);
- (v) a movable strip (70) linked to said first and second actuating points (31, 32) and forming with said first and second contact support members (39, 37) and a line which joints said first and second pivoting points (29, 30) a deformable parallelogram (41);
- (vi) first and second toggle springs (66, 67) respectively connecting said first and second actuating points (31, 32) at a first end thereof, said first and second toggle springs (66, 67) having respective second ends which are fixedly anchored with respect to the case (2);
- (vii) snap-acting tripping means (46) connecting said bi-metallic strips (4, 6, 8) to said movable strip (70), and selection means (16) for selecting the operating mode of the first switch, said first and second switches (28, 27) being located in said second cavity (3) on one side of said further partition wall (47), while said movable strip (70), said snap-acting tripping means (46) and said selector means (16) are located in said second cavity (3) on the other side of said further partition wall (47).

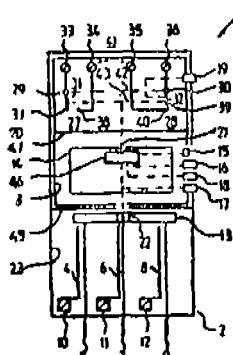


FIG. 1

(Compl. Specn. 13 pages)

Dgrs. 4 sheets)

Ind. Cl. : 70 C<sub>1</sub> [LVIII(5)]; 188 [XXXIII(9)] 172723Int. Cl.<sup>4</sup> : C 25 D 3/12 9/10.

## METHOD OF COATING AN ALLOY STEEL OR NICKEL-BASED SUPERALLOY SUBSTRATE.

Applicant(s) : SOCIETE NATIONALE D'ETUDE ET DE CONSTRUCTION DE MOTEURS D'AVIATION "S. N. E.C.M.A.", A FRENCH COMPANY, OF 2, BOULEVARD VICTOR, 75015 PARIS, FRANCE.

Inventors : ROBERT MARTINOU AND MICHEL RUIMI.

Application for Patent No. 366/Del/88 filed on 04 July, 1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 12 Claims

A method of coating an alloy steel or nickel-based superalloy substrate for providing protection against oxidation and frictional wear at temperatures below 600°C, characterised in the steps of :

- (1) subjecting ceramic particles selected from a group of oxides and carbides such as SiC, Al<sub>2</sub>O<sub>3</sub> and Cr<sub>2</sub>O<sub>3</sub>, to a decontamination process comprising washing said ceramic particles in hydrochloric acid;
- (2) introducing said ceramic particles into a sulphamate bath having a metallic salts content (Ni+Co) of from 70 g/l to 100 g/l, a Ni/Co mass ratio of from 5 to 33, and so that the mass content of the ceramic particles in suspension is from 50 g/l to 300 g/l; and
- (3) coating the substrate in the bath by electrolytically co-depositing a binary nickel-cobalt matrix having therein an homogenous dispersion of said ceramic particles, said co-deposition being effected while subjecting the bath to agitation to maintain a homogenous dispersion of particles in suspension and to ensure better incorporation thereof in the metal matrix whereby the content of the ceramic particles in the coating is from 3.5% to 10% by mass, and if desired consolidating the particles in the matrix by a subsequent heat treatment to diffuse silicon in the coating matrix.

(Compl. Specn. 28 pages)

Dgrs. 6 sheets)

Ind. Cl. : 32A1.

172724

Int. Cl.<sup>4</sup> : C 09 B 46/00.A DRY COMPOSITION SUITABLE FOR THE COLO-  
RATION OF SYNTHETIC TEXTILE MATERIALS.

Applicant : IMPERIAL CHEMICAL INDUSTRIES PLC A BRITISH COMPANY OF IMPERIAL CHEMICAL HOUSE, MILLBANK, LONDON SW1P 3JF, ENGLAND.

Inventors : DAVID BRIERLEY AND ALAN THOMAS LEAVER.

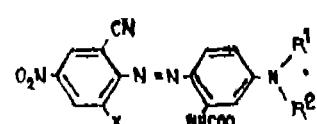
Application for Patent No. 572/Del/88 filed on 5 July 1988.

Convention date 22 July 1987/8717309/U.K.

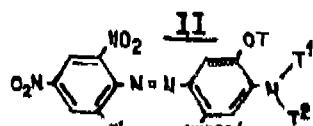
Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 4 Claims

A dye composition suitable for the coloration of synthetic textile materials comprising an intimate mixture of an azo dye of the formula I of the drawings



and an azo dye of the formula II of the drawings wherein



X & X' are each independently selected from Br, Cl and I  
Q & Q' are each independently C<sub>1</sub>-4-alkyl;

T is Cl/2-4-alkyl;

R<sup>1</sup> & R<sup>2</sup> are each independently C<sub>1</sub>-4-alkyl or C<sub>2</sub>-4-alkenyl;  
T<sup>1</sup> & T<sup>2</sup> are each independently C<sub>1</sub>-4-alkyl or C<sub>2</sub>-4-alkenyl;  
the amount of the dye of formula I is being from 80 to 88%  
and the rest being the dye of formula II.

(Compl. Specn. 8 pages

Drgs. 2 sheets)

Ind. Cl. : 32 E.

172725

Int. Cl. : C08 F 4/14.

#### A PROCESS FOR PREPARING A LOWER ALKENE POLYMER.

Applicant : THE LUBRIZOL CORPORATION, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF OHIO, UNITED STATES OF AMERICA, OF 29400 LAKELAND BOULEVARD, WICKLIFFE, OHIO 44092, UNITED STATES OF AMERICA.

Inventors : JACK LEE KARN, WILLIS PERRY NICHOLS.

Application for Patent No. 577/Del/1988 filed on 6 July 1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

#### 15 Claims

A process for preparing a lower alkene polymer having a molecular weight of 250 to 500 from a lower alkene monomer feedstream said process comprising the steps of :

- (A) contacting the lower alkene monomer such as herein described with a catalyst system comprising boron trifluoride and at least one acid such as herein described and
- (B) polymerizing the lower monomer in the presence of the catalyst system at a temperature of —3°C to —30°C thereby obtaining the required lower alkene polymer.

(Compl. Specn. 13 pages.

Ind. Cl. : 85 E.

172726

Int. Cl. : F 27 D 1/12, 1/14.

#### A CERAMIC TILE WITH A LOCATING ELEMENT.

Applicant : YORK LININGS (INTERNATIONAL) LIMITED, A BRITISH COMPANY, OF THE MANOR HOUSE, 127 LAWRENCE STREET, YORK Y01 3EF, ENGLAND.

Inventor : JAMES BLACK.

Application for Patent No. 578/Del/88 filed on 6 July 1988.

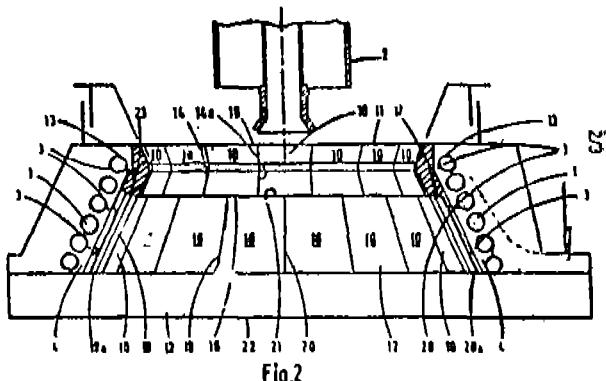
Convention date 6 July 1987/8715871/Great Britain.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

#### 4 Claims

A ceramic tile with a locating element for locating and fixing the ceramic (10) tile to a main support (1) surface, the locating element having an elongate (31) body, an enlarged (33) head at one end and at the opposed (32) end in attachable to the main (1) support surface; the ceramic (10) tile defining a recess (13) in its rear surface, (11) the recess (13) having a substantially corresponding cross-section to that of the enlarged (33) head of the elongate locating element (3) in the axial direction thereof, the diametric width

of the recess (13) being greater than the width of the opening to the recess (13) and the width of the opening being substantially wider than the width of the elongate body (31) of the locating (3) member so that the locating (3) member is rotatable within the recess (13) in a direction transverse to the longitudinal axis of the locating (3) member to move the said elongate (31) body between opposed sides of the recess (13) opening.



(Compl. Specn. 11 pages

Drgs. 3 sheets)

Ind. Cl. : 54+185B+E.

172727

Int. Cl. : A 23F 3/16, 3/20, 3/34, 3/36.

#### A METHOD FOR PRODUCING A SHELF-STABLE, NON-CLOUDING TEA CONCENTRATE.

Applicant : GENERAL FOODS CORPORATION, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA, OF 250 NORTH STREET, WHITE PLAINS, NEW YORK 10625, UNITED STATES OF AMERICA.

Inventors : DAVID NEWLIN EVANS, CHARLES LOUIS FAIRCHILD, KARL CORNELIUS KRAMER, JOHN SPRILL, GERARD JOHN WANSOR, ROBERT WILLIAM WOOD.

Application for Patent No. 580/Del/88 filed on 6 July 1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

#### 9 Claims

A method for producing a shelf-stable, non-clouding tea concentrate having a pH of from 3.9 to 4.3 consisting of the following steps :

- (a) Producing a deionized, aqueous tea concentrate having a tea solids level of from 8 to 24% by weight and a pH of from about 4.7 to 5.5, said concentrate being either a fresh brewed concentrate which is obtained by infusing tea leaf material with hot, deionized water or a reconstituted concentrate which is obtained by dissolving spraydried tea solids in deionized water;
- (b) adding food acceptable acids such as herein described to the aqueous tea concentrate of step (a) to reduce the pH to from 2.9 to 3.5;
- (c) reducing the temperature of the reduced-pH concentrate of step (b) from 30° to 45°F and holding said concentrate at this reduced temperature for at least one hour in the presence of a minimal amount of agitation in order to produce a precipitate;
- (d) removing in a manner known per se the precipitate from the concentrate of step (c) in order to clarify the concentrate, thereby resulting in a 5 to 20% reduction in the level of solids contained in the concentrate;

(e) raising the pH of the clarified concentrate to a level of from 3.9 to 4.3 by the addition of food approved alkaline materials such as herein described and, thereafter

(f) storing the concentrate at ambient temperature.  
(Compl. Specn. 12 pages)

Ind. Cl. : 31 B LVIII (2)

172728

Int. Cl.<sup>4</sup> : H 01 F 7/16.

## AN ELECTROMAGENT.

Applicant : LA TELEMECANIQUE ELECTRIQUE, A FRENCH CORPORATION OF 33BIS, AVENUE DU MAR-ECHAL JOFFRE, 92002, NANTERRE CEDEX, FRANCE.

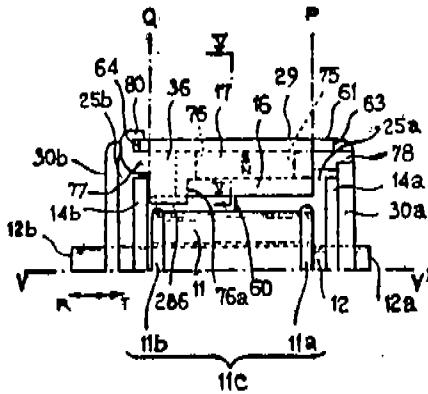
Inventors : JACQUE OLIFANT, JEAN-FRANCOIS COUVREUR.

Application for Patent No. 586/Del/88 filed on 8 July, 1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 10 Claims

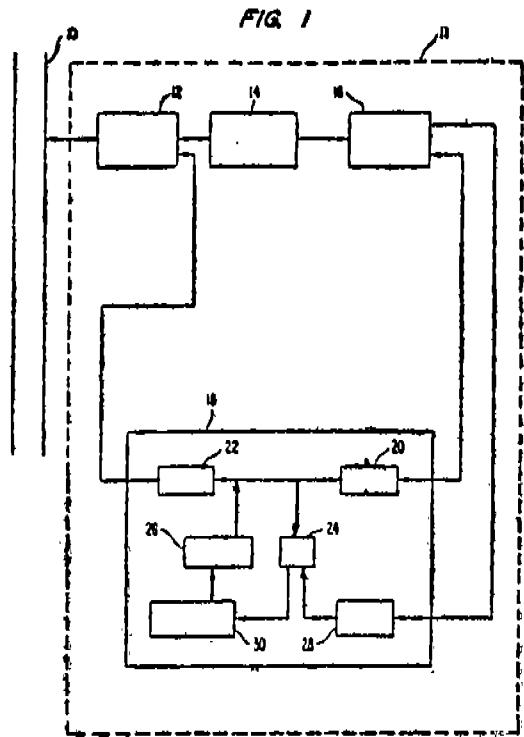
Electromagnet with comprising an induction winding and first and second magnetic devices movable relative to each other, the first device comprising a core (12) surrounded by the winding, (11) the second device comprising an internal pole piece, (16), relatively close to the winding and an external pole piece relatively far from the winding (11), a permanent magnet (17) interposed between the external and internal pole pieces (16, 61), the core (12) bearing on at least one side of the winding a pole flange (14a, 14b) disposed in an air gap (25a, 25b) which is defined between the internal and external pole pieces, (16, 61) characterised by an a magnetic cage snap (60) fastened on the external pole piece and having for the permanent magnet (14) and for the internal pole piece (16) respective recesses (63, 64) defined by means for positioning and retention with respect to displacements transverse to the magnetic axis of the permanent magnet (17).



## 6 Claims

A memory board for use in a data processing system and having error detection circuitry, said memory board comprising :

- (a) a memory for storing data words;
- (b) first reading means, connected to said memory, for reading data word from the memory;
- (c) second reading means, connected to the memory, for reading from the memory a first set of check bits associated with the data word read from the memory;
- (d) means, connected to the first reading means, for generating a second set of check bits from the data word that has been read from the memory;
- (e) first performing means, connected to the second reading means and the generating means, for performing a first logical operation between the first set of check bits and the second set of check bits to generate a syndrome;
- (f) means, connected to the first performing means, for decoding the syndrome in order to detect the presence or absence of an uncorrectable error;
- (g) second performing means, connected to the decoding means and the generating means, for performing, after the detection of an uncorrectable error, a second logical operation between the second set of check bits and byte write error code to generate a third set of check bits;
- (h) means, connected to the decoding means, the first reading means, and the memory, for writing, after the detection of an uncorrectable error, the data word into the memory; and
- (i) means, connected to the decoding means, the second performing means, and the memory, for writing, after the detection of an uncorrectable error, the third set of check bits into the memory so as to associate the third set of check bits with the data word.



(Compl. Specn. 25 pages.)

Drg. 6 sheets.)

Ind. Cl. : 35 E.

172732.

Int. Cl. : C04B 35/04.

## A PROCESS FOR THE PREPARATION OF MAGNESIA-SPINELIDE REFRACTORIES.

Applicant : NATIONAL COUNCIL FOR CEMENT AND BUILDING MATERIALS, M-10, SOUTH EXTENSION, PART-II, NEW DELHI-110 049, REGISTERED UNDER THE SOCIETIES ACT.

Inventor : HOSAGRAHARA CHANDRASEKHARIAH VISVESVARAYA.

Application for Patent No. 414/Del/88 filed on 10 May, 1988.

Complete Specification left on 10 August, 1989.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 6 Claims

A process for the preparation of magnesia spinelide refractories having a  $\text{CaO}/\text{SiO}_2$  ratio in the matrix between 1 and 2, which comprises in preparing a mix of fines of calcite and dead burnt magnesite adding chromite ore, middle and coarse fractions of dead burnt magnesite and a binder such as sulphite lye thereto, characterised in that said mix consists of 25 to 35% by weight of fines of calcite and dead burnt magnesite, 15-20% by weight of chromite ore, 18-30% by weight of said magnesite in middle fraction and 25-38% by weight of said magnesite in coarse fraction and said binder, subjecting said mix to the sequential steps of pressing, drying, and firing in a known manner.

(Provisional Specn. 4 pages.)

(Compl. Specn. 8 pages.)

Ind. Cl. : 55 E4.

172733

Int. Cl. : C07C 109/04.

## PROCESS FOR THE PREPARATION OF HYDRAZINE DERIVATIVES USEFUL AS ANTIHYPERTENSIVES.

LES LABORATOIRES MERAM, A FRENCH COMPANY, OF 4, BOULEVARD MALESHERBES, 75008 PARIS, FRANCE.

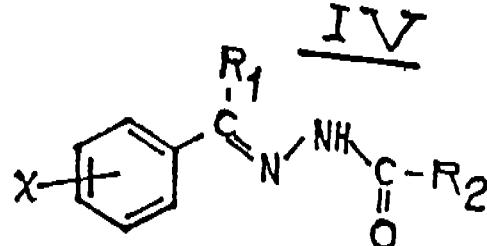
Inventors : MARCEL MIOCQUE, PIERRE BINET, HERVE GALONS.

Application for Patent No. 425/Del/1988 filed on 13 May, 1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 8 Claims

A process for the preparation of hydrazine derivatives having the formula IV of the drawings in which :



—X is a C<sub>1</sub>-C<sub>4</sub> alkyl, the trifluoromethyl group or a halogen selected from chloro (in ortho position or meta position), fluoro or bromo;

—R<sub>1</sub> is a C<sub>1</sub>-C<sub>4</sub> alkyl; and

—R<sub>2</sub> represented;

—hydrogen;

—a branched C<sub>3</sub>-C<sub>4</sub> alkyl;

—group of formula —CR<sub>3</sub>R<sub>4</sub>R<sub>5</sub>' in which :

R<sub>3</sub> represents a group OR<sub>6</sub>, SR<sub>6</sub> or NR<sub>7</sub>R<sub>8</sub>, in which

—R<sub>6</sub> is hydrogen or a C<sub>1</sub>-C<sub>4</sub> alkyl; and

—R<sub>7</sub> and R<sub>8</sub> represent hydrogen, a C<sub>1</sub>-C<sub>4</sub> alkyl group or a C<sub>2</sub>-C<sub>4</sub> acyl group, a benzoyl group, or alternatively R<sub>7</sub> and R<sub>8</sub>, together with the nitrogen atom to which they are bonded,

Form a 5-membered or 6-membered heterocyclic group.

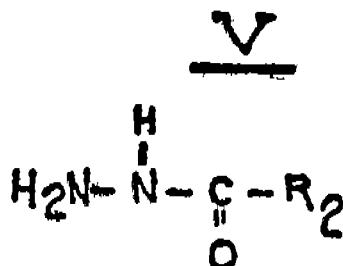
R<sub>4</sub> and R<sub>5</sub> are identical and represent hydrogen or a C<sub>1</sub>-C<sub>4</sub> alkyl group or alternatively R<sub>4</sub> is hydrogen and R<sub>5</sub> represents either a C<sub>1</sub>-C<sub>4</sub> alkyl group optionally substituted by a hydroxyl group or a phenyl group, or

R<sub>3</sub>, R<sub>4</sub>, and R<sub>5</sub>, together with the carbon atom to which they are bonded form an amido group;

—a phenyl group optionally substituted by a hydroxyl group; or

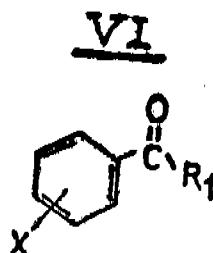
—a 5-membered or 6-membered heterocyclic group, a C<sub>1</sub>-C<sub>4</sub> alkoxy group, preferably ethoxy, and their pharmaceutically acceptable salts, which process consists of :

(1) preparing in a first step, an acylhydrazine of formula V of the drawings



wherein R<sub>2</sub> is defined above by reacting a hydrazine hydrate and an ester of formula R<sub>2</sub>-COOR, in which R<sub>2</sub> is as defined above and R is an alkyl group such as herein described; and then

(2) reacting, in a second step, the product of first step with an aryl alkyl ketone of formula VI of the drawing



in which R<sub>1</sub> and X are as defined above to give the hydrazine derivative of formula IV of the drawings

in which X, R<sub>1</sub> and R<sub>2</sub> are as defined above and

(3) optionally converting the thus obtained compounds into their pharmaceutically acceptable salts in a manner known per se.

(Compl. Specn. 34 pages.

Drg. 3 sheets.

Ind. Cl. : 188.

172734

Int. Cl.<sup>4</sup> : C 23C 14/14.

A METHOD OF FABRICATING MICROCRYSTALLINE SEMI-CONDUCTOR ALLOY MATERIAL.

Applicant : ENERGY CONVERSION DEVICES, INC., A CORPORATION OF THE STATE OF DELAWARE, OF 1675 WEST MAPLE ROAD, TROY, MICHIGAN 48084, UNITED STATES OF AMERICA.

Inventors : SUBHENDU GUHA, STANFORD ROBERT OVSHINKY.

Application for Patent No. 427/Del/1988 filed on 13 May, 1988.

Appropriate office for opposition proceeding (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

#### 2 Claims

A method of fabricating microcrystalline semiconductor alloy material which included a band gap widening element such as described herein, said method including the steps of :

providing a substrate such as herein described in a deposition chamber in a manner such as herein described; vacuumizing said deposition chamber to a pressure of about 1.5. Torr;

introducing a precursor mixture including a silicon-containing gas, a boron or phosphorous-containing gas, a hydrogen-containing gas and carbon or nitrogen-containing gas into said deposition chamber through a gas conduit; subjecting said precursor mixture to an a.c. glow discharge in the absence of a magnetic field of sufficient strength to induce electron cyclotron resonances; and

depositing a doped microcrystalline semiconductor alloy material characterised by a band gap of greater than 2.0eV and a conductivity of greater than 10<sup>10</sup> cm<sup>-1</sup> on said substrate.

(Compl. Specn. 35 pages.

Drg. 1 sheet.)

Ind. Cl. 172 AE.

172735

Int. Cl.<sup>4</sup> : B65 H 54/22.

AN AUTOMATIC EMPTY PIRN MAGAZINE.

Applicants : VIJAYARANGAM NAIDU, SREERAM-PURAM, SAMPANGI NAIDU, AN INDIAN NATIONAL OF POCKET-A, BLOCK-G, 561-B, SHALIMAR BAGH, NEW DELHI-110 033.

Inventors : VIJAYARANGAM NAIDU, SREERAM-PURAM, SAMPANGI NAIDU.

Application for Patent No. 439/Del/1988 filed on 19 May, 1988.

Appropriate office for opposition proceeding (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

#### 4 Claims

An automatic empty pirn magazine. A comprising a pair of sidewalls A<sub>1</sub> with stay plates C being secured to the discharge end A<sub>2</sub> on either sides thereof to form a support for a pirn P, said stay plates forming support being disposed above a chute for receiving said pirn P, means being provided at the opposite end for urging said pirn P to be displaced

away from said support C so as to allow said pin to be discharged onto said chute M.

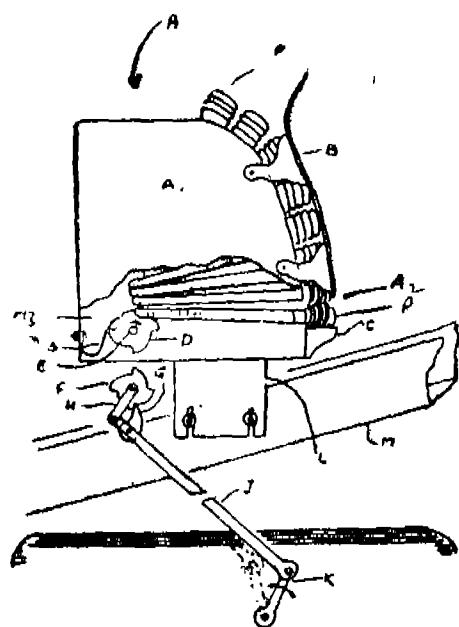


Fig 1

(Compl. Specn. 7 pages.

Drg. 2 sheets)

Ind. Cl. : 207.

172736

Int. Cl. : B 27 B 33/00 33/20.

**A CUTTER TO BE MOUNTED ON A SPINDLE OF A ROTARY HAND TOOL.**

Applicant : KEVIN ROSS INKSTER, OF FOREST ROAD, NANNUP, WESTERN AUSTRALIA 6275, AUSTRALIA AND DAVID JOHN LEWIS, OF LOCATION 1423, BARRABUP ROAD, NANNUP, WESTERN AUSTRALIA 6275, AUSTRALIA, BOTH AUSTRALIAN CITIZENS.

Inventors : KEVIN ROSS INKSTER, DAVID JOHN LEWIS.

Application for Patent No. 444/Del/1988 filed on 19 May, 1988.

Convention date 20-05-1987/P1 02041/Australia.

Appropriate office for opposition proceeding (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

**5 Claims**

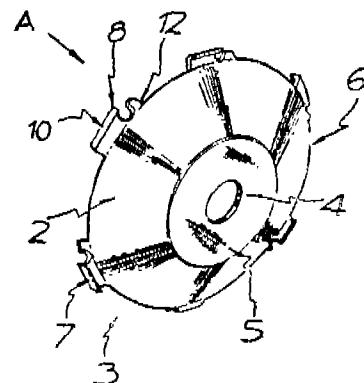
A cutter to be mounted on a spindle of a rotary hand tool, said cutter comprising :

a rigid member (3) mounted co-axially on the tool spindle to rotate therewith;

a plurality of spaced cutting teeth (7) integral with and arranged in a single row about the periphery of the rigid member (3) characterised by each said cutting tooth (7) having a transverse cutting edge (8) extending in a direction transverse to the plane of rotation of the rigid member (3) to perform cutting in response to movement of the rotating cutter in the direction of the plane of rotation, and a radial cutting edge (9) extending in a direction substantially radial to the axis of rotation of the rigid member (8) to perform cutting in response to movement of the rotating cutter in the direction normal to the plane of rotation, each cutting tooth (7) being relieved rearward of the respective cutting edge for enabling said cutter to cut in the direction normal to the plane of rotation thereof and in the direction normal to said plane of rotation simultaneously; and

a plurality of rigid depth control projections (12) integral with the rigid member (3) one located in advance of each cutting tooth (7) in respect to the direction of rotation the radial extent of each projection (12) being less than that of the transverse cutting it precedes whereby the difference therebetween in radial extent controls the depth of cut of said transverse cutting edge (8).

FIGURE 2



(Compl. Specn. 12 pages.

Drg. 2 sheets)

Ind. Cl. : 20B [XLII (2)]. 146B.

172737

Int. Cl. : B43K 31/00.

**A DRAWING INSTRUMENT.**

Applicant : MALIKA DEWAN, AN INDIAN NATIONAL OF BE-373A, HARI NAGAR (BACK STREET NO. 1), NEW DELHI-110 069, INDIA AND MEENAKSHI KUMAR, AN INDIAN NATIONAL OF D-93, AMAR COLONY, LAJPAT NAGAR-IV, NEW DELHI-110 024, INDIA.

Inventors : MALIKA DEWAN AND MEENAKSHI KUMAR.

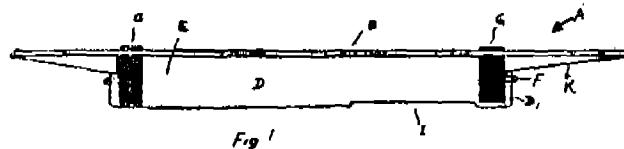
Application for Patent No. 446/Del/88 filed on 20 May 1988.

Complete Specification left on 28-7-1989.

Appropriate office for opposition proceeding (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

**7 Claims**

A drawing instrument comprising a plate member (H) having a protector (I) in the centre and scale face (B) with gradations (C) marked thereon on one side thereof, the other side of said plate member (H) being extended into a housing means (D) for rotatably holding means for example a roller (E) extending outwardly from the lower open end of said housing (H) so as to facilitate a displacement of said instrument in a straight path in the vertical axis.



(Provisional Specn. 5 pages.)

(Compl. Specn. 8 pages.

Drg. 1 sheet)

Ind. Cl. : 84C<sub>1</sub> [XXXII (2)]

172738

Int. Cl.<sup>4</sup> : C 10 L 9/02.

## A PROCESS FOR TREATING LOW RANK COAL TO INHIBIT SPONTANEOUS COMBUSTION THEREOF.

Applicant : SHELI OIL COMPANY, A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA, OF 900 LOUISIANA, HOUSTON, TEXAS 77002, UNITED STATES OF AMERICA.

Inventors : MARK, ALAN SIDDOWAY, NEAL DON STIDHAM AND WILLIAM CARL MACHMER.

Application for Patent No. 481/Del/88 filed on 31st May 1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 11 Claims

A process for treating low rank coal to inhibit spontaneous combustion thereof, which process is characterised by spraying particulate coal with an aqueous solution of an oxidant containing combined oxygen to distribute the aqueous solution substantially homogeneously over the surfaces of the coal particles to add a maximum of 10% by weight of water to the coal, drying the resulting wetted coal by heating the coal particles from ambient temperature to a maximum of about 204°C (400°F) to reduce the moisture content to substantially the moisture content desired for the coal product, and cooling the so-treated coal to a temperature below 38°C (100°F).

(Compl. Specn. 13 pages.)

Ind. Cl. : 24 D 1 [LV].

172739

Int. Cl.<sup>4</sup> : B 60 T 11/10 1538.

## SELF-ENERGISING DISC BRAKES.

Applicant : LUCAS INDUSTRIES PUBLIC LIMITED COMPANY, A BRITISH COMPANY, OF GREAT KING STREET, BIRMINGHAM B19 2XF, ENGLAND.

Inventors : ANTHONY GEORGE PRICE, CAMPBELL ROY & DAVID PAARRY.

Application for Patent No. 599/Del/88 filed on 13 July 1988.

Convention date 22-07-1987, 07-12-1987, 01-02-1988/8717307, 8728532, 8802185/U.K.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 18 Claims

A self-energising disc brake in which rotatable friction discs (1, 2) having linings (8) of friction material are provided to be brought into engagement with spaced opposed braking surfaces (9) in a housing (3) by pressure plates (10, 11) located between said friction discs (1, 2) and centred by stationary pilot (12, 13, 14, 15) lugs, balls (16) or rollers are located in oppositely inclined angularly spaced recesses (17) in the adjacent faces of the pressure plates (10, 11), and the application of the brake is initiated by moving the pressure plates (10, 11) angularly in opposite directions, which causes the said pressure plates (10, 11) to move axially relatively away from each other due to the tendency for the balls (16) or rollers to ride up ramps defined by the end faces of said recesses (17) so that the pressure plates (10, 11) move into engagement with said friction discs (1, 2) which are urged into engagement with the radial surfaces (9) on the housing, the pressure plates (10, 11) being carried round with the friction discs (1, 2) until one is arrested by the engagement of a lug (22, 23) on the respective plate with a drag-taking stop abutment (20, 21) in the housing, and the continued angular movement of the other pressure plate providing a servo action, the brake being operated for normal service operation by

means of an hydraulic actuator (40) which is located within the housing (3), and said actuator comprises a cylinder body having a longitudinal bore (12), the axis of said longitudinal bore is chordal to the pressure plates (10, 11) and in which works at least one piston (46, 47) co-operating with one of the said pressure plates (10, 11), works in said bore, the said cylinder (41) body is located in the said bore between the said pressure plates (10, 11) that the line of action of the force from the said piston (46, 47) to the respective pressure plate acts at a position disposed within the radial thickness of the plate between its radially innermost and outermost and peripheral edges.

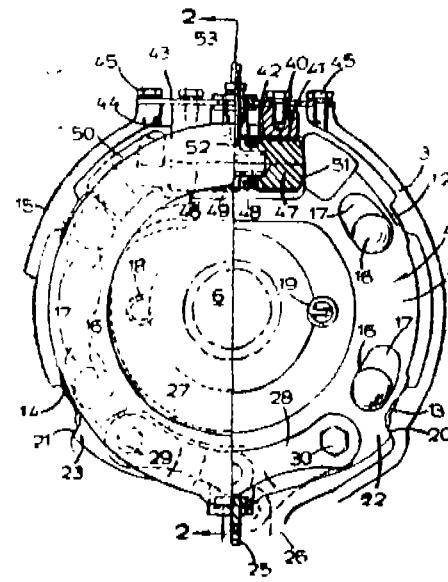


FIG 1

(Compl. Specn. 18 pages.)

Drg. 7 sheets.)

Ind. Cl. : 40 E [IV (1)]

172740

Int. Cl.<sup>4</sup> : B 01 D 12/00 15/00.

## A CENTRIFUGAL SEPARATOR FOR THE SEPARATION OF A LIQUID INTO SEVERAL PHASES OF DIFFERENT DENSITY.

Applicant FRAU S.P.A., OF VIA BIANCHE, 5, CARRE VICENZA, ITALY, AN ITALIAN COMPANY.

Inventor : REMO ZUCCATO.

Application for Patent No. 600/Del/88 filed on 13 July, 1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 6 Claims

A centrifugal separator for the separation of a liquid into several phases of different density which comprises,

a fixed upper head (20),

a rotating body (7) having a central part,

an inlet conduit (1) for said liquid into said rotating body (7).

concentric external and internal conduits (2, 3) for the different phases of different density, the liquid of lower density ascending through the internal conduit (2) and the liquid of greater density ascending through the external conduit (3),

coaxial outlet conduits (4, 5) disposed in said fixed head with said internal conduit (2) communicating with the first coaxial outlet conduit (4) and said external conduit (3)

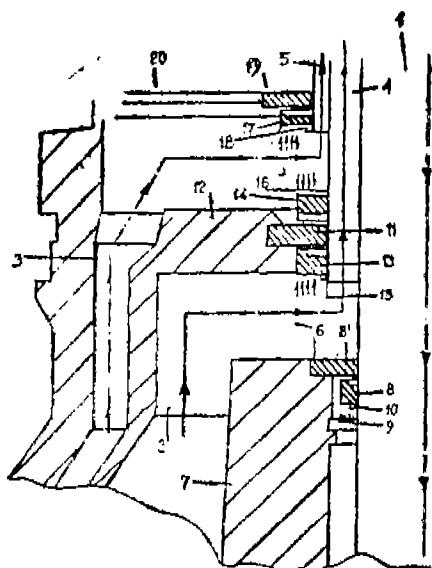
communicating with the second coaxial outlet conduit (5), characterised in that an immovable ring (16) is fixed to said central part of the rotating body (7), a first movable ring (8) is located coaxially with respect to said inlet conduit (1) and, under the thrust of the pressure of the liquid in said inlet conduit (1), comes into contact with said fixed ring (6) to provide a seal between said inlet conduit (1) and said internal conduit (2),

a fixed disk (12) is located in the upper part of said internal conduit (2), second and third movable rings (13, 14) are located coaxially with respect to said first coaxial outlet conduit (4) and are displaceable with respect thereto, said second and third movable rings (13, 14) being subject to the pressure of the liquid of lower density from said internal conduit (2) and to the pressure of liquid of greater density from said external conduit (3), said rings (13, 14) providing a seal between the liquids in said internal and external conduits (2, 3), and

a fourth movable ring (17) is disposed externally and coaxially with respect to said second coaxial outlet conduit (5), said fourth external movable ring (17) being displaceable along said second coaxial outlet conduit (5), and provides an external seal,

said movable rings (8, 13, 14, 17) ensuring hermetic seals as well as a perfect separation between the various phases without requiring return springs and being lapped by said liquids whereby they are cooled.

Fig. 1



Compl. Specn. 9 pages.

Drg. 1 (sheet.)

## CANCELLATION PROCEEDINGS UNDER SECTION 51A

An application made by the Elgi Finance Limited for cancellation of the registration of Design Nos. 164900 & 164904 in Class 3 in the name of Rangasamy Selvaraj on 11-5-1993.

## CLAIM UNDER SECTION 20(1) OF THE PATENTS ACT, 1900

The Claim made by STRACHAN HENSHAW MACHINERY LIMITED, in connection with Patent Application No. 105/MAS/91 (172705) has been allowed.

The Claim made by STRACHAN HENSHAW MACHINERY LIMITED, in connection with Patent Application No. 106/MAS/91 (172706) has been allowed.

The Claim made by STRACHAN HENSHAW MACHINERY LIMITED, in connection with Patent Application No. 107/MAS/91 (172707) has been allowed.

## PATENTS SEALED ON 15-10-1993

170001\* 170927\* 170994 170996 170998 171002\* 171006  
 171011 171012\* 171014 171015 171028 171029\*D 171031  
 171033 171036 171039 171041\* 171042 171043 171044  
 171045 171046\* 171047\* 171049\* 171050\* 171051\* 171053  
 171054 171063 171064 171065\* 171069 171071 171075\*D  
 171091 171250\* 171321\* 171359\* 171389.

CAL-11, MAS-09, DFL-07 &amp; BOM-07.

\*Patents shall be deemed to be endorsed with the words LICENCE OF RIGHT Under Section 87 of the Patents Act, 1970 from the date of expiration of three years from the date of Sealing.

## D—DRUG PATENT, E—FOOD PATENT.

## Amendment Under Section 78(1)

In pursuance of the order dated 05-05-1992 of Information Officer in the complete specification No. 168950 (919/Cal-87) Under Section 78(1) of the Act, in page 15 after line 27 insert the following matter :

"The method according to this invention does not fall within the category of agriculture or horticulture."

## REGISTRATION OF ASSIGNMENTS LICENCES, ETC. (PATENTS)

Assignments, Licences or other transaction affecting the interest of the original patentee have been registered in the following case.

The number of each case is followed by the name of the parties claiming interest :—

159642 )  
 ) —Shriram Refrigeration Industries Limited.  
 160497 )

## RENEWAL FEES PAID

151765 152459 152605 153014 153015 153797 154137 154225  
 154226 154577 154815 155432 155608 156053 156092 156278  
 156348 156553 156867 156930 156973 157199 157386 157387  
 157431 157449 157621 157649 157818 157822 157874 158237  
 158386 158392 159446 159682 159687 159725 160005 160055  
 160329 160802 160854 160928 161142 161143 161196 161304  
 161320 161394 161582 161591 161623 161910 162037 162373  
 162758 162819 163017 163496 163760 163895 163972 163974  
 164164 164254 164421 164471 164738 164835 164875 164876  
 164945 165016 165017 165058 165147 165335 165336 165337  
 165393 165411 165430 165449 165625 165630 165877 166044  
 166199 166231 166232 166233 166234 166235 166408 166426  
 166444 166790 166974 167061 167069 167352 167372 167416  
 167417 167418 167660 167772 167812 168014 168123 168230  
 168496 168607 168784 168825 168950 169015 169085 169244  
 169461 169906 169940 169979 170034 170053 170058 170064  
 170068 170069 170111 170189 170213 170218 170257 170261  
 170292 170295 170313 170321 170479 170484 170523 170534  
 170603 170711 170713 170714 170727 170773 170774 170775  
 170777 170778 170792 170793 170798 170806 270842 170862  
 170867 170869 170891 170926 170970 170980 171152 171280.

## OPPOSITION PROCEEDING UNDER SEC. 25.

An Opposition as entered by M/s. The Dharamsi Morarji Chemical Co. Ltd., Bombay to grant of Patent Application No. 169429 made by M/S. Larsen & Tubro Ltd., Bombay notified in the Gazette of India, Part III, Section 2 dated 25th April, 1992 succeeded and the grant of a Patent thereon refused.

## RESTORATION PROCEEDINGS

Notice is hereby given that an application for restoration of Patent No. 160621 dated the 15th October 1984 made by National Research Development Corporation of India on the 24th September, 1991 and notified in the Gazette of India part III, Section 2, dated the 28th December, 1991 has been allowed and the said patent restored.

## REGISTRATION OF DESIGNS

The following designs have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in the entries is the date of registration of the design included in the entry.

Class 3. No: 164784. Cosmic Traffic Systems Pvt. Ltd. of 5, Anjali Apartments, Ramkrishna Mission Marg, 14B Road, Khar (West), Bombay-400052, Maharashtra, India, Indian Co. "Barrier Post for Traffic". September 15, 1992.

Class 3. No: 164785. Cosmic Traffic System Pvt. Ltd. of 5, Anjali Apartments, Ramkrishna Mission Marg, 14B Road, Khar (West), Bombay-400052, Maharashtra, India, Indian Co. "Traffic Directional Bollard". September 15, 1992.

Class 3. No: 164786. Cosmic Traffic System Pvt. Ltd. of 5, Anjali Apartments, Ramkrishna Mission Marg, 14B Road, Khar (West), Bombay-400052, Maharashtra, India, Indian Co. "Traffic directional bollard with small stand". September 15, 1992.

Class 3. No: 164792. Anand Arc Electrodes Pvt. Ltd., 23, Kala Udyog Premises, Opp. Shangrila Biscuits Factory, L.B.S. Marg, Bhandup (West), Bombay-400078, Maharashtra India. "Box". September 16, 1992.

Class 3. No: 164891. G. P. Marketing, Indian Partnership Firm of 57, Lohar Chawl, Bombay-400002, Maharashtra, India "Jewellery Box". October 14, 1992.

Class 3. No: 164901. Jyoti Industries, Indian Partnership Firm of 914, Electron House, Century Mill Passage Road, Near Centry Bazaar, Worli, Bombay-400005, Maharashtra, India. "Strainer for wash basin". October 19, 1992.

Class 3. No: 164902. Upkar Enterprises, F-166/5, Rajouri Garden, New Delhi-110026, India, Indian Proprietorship Concern. "Baby cup". October 20, 1992.

Class 3. No: 164918. Freemans Tools, Indian Partnership Firm, B-XXXV/1380A, Barewal Road, Ludhiana-141001, Punjab, India. "Screw driver". October 26, 1992.

Class 3. Nos. 165057 & 165058. Pratap Plastics, B-106, Virwani Industries Estate, Off : Western Express Highway, Goregaon (E), Bombay-400063, Maharashtra, India, Indian Partnership Firm. "Clip". November 27, 1992.

Class 3. No: 165132. The Gillette Company of Prudential Tower Bldg., Boston, Massachusetts 02199, U.S.A. "Dispenser". December 21, 1992.

Class 3. No: 165151. Campion Business Associates Pvt. Ltd., Indian Company of 7, Avenue Road, Nungambakkam, Madras-600034, T. N., India.

"Lamp with holder casing". December 29 1992.

Class 3. No: 165182. Sonic Electrochem Pvt. Ltd. of 39, Patel Nagar, Indore-452001, M.P., India. "Mosquito repellent". January 12, 1993.

Class 3. No: 165193. Hindustan Lever Ltd., Indian Company of Hindustan Lever House, 165/166, Backbay Reclamation, Bombay-400020, Maharashtra, India. "Breaker plate for extruders". January 13, 1993.

Class 3. No: 165209. Texspares Corporation, Partnership Firm of S-D, Ansa Industrial Estate, Sakinaka, Bombay-400072, Maharashtra, India. "Mifer chamber". January 21, 1993.

Class 3. 165212. Kanmoor Foods Limited, Indian Company Manmoor House, 281/27, Narshi Natha Street, Bombay-400009, Maharashtra, India. "Container Lid". January 24, 1993.

Class 3. No: 165213. Chinar Trust of C-37, Connaught Place, New Delhi-110001, India, Indian Trust. Citrus Juicer". January 21, 1993.

Class 3. No: 165242. Crystal Plastics & Metallizing Pvt. Ltd., Sanghi House, Palkhi Galli, Off Veer Savarkar Marg, Prabhadevi, Bombay-400025, Maharashtra, India. "Comb". February 1, 1993.

Class 3. 165255. Needle Industries (I) Ltd., Indian Company, of 10, Bishop Waller's Avenue South, Mylapore, Madras-600004, T. N., India. "Tatting shuttle". February 2, 1993.

Class 3. No: 165316. Salzer Electronics Ltd., Indian Company, of Samichettipalayam P.O. Jothipuram (Via), Coimbatore-641047, T.N., India. "Contact stage and cover plate". February 11, 1993.

Class 3. No: 165457. MRF Ltd., 24, Greams Road, Madras-600006, T.N., India, Indian Co. "Precured rubber tread". March 23, 1993.

Class 3. No: 165527. Campbell Agro Mfg. Industries Pvt. Ltd., Indian Co. of Old Chinoy Building, 275E, Targeo Road, Bombay-400007, Maharashtra, India. "Bottles". April 13, 1993.

Class 3. 165566. Eagle Flask Industries Ltd. of Eagle Estate, Talegaon 410507, Dist : Pune, Maharashtra, India. "Water carrier". April 20, 1993.

Class 3. No: 165567. Eagle Flask Industries Ltd. of Eagle Estate, Talegaon 410507, Dist : Pune, Maharashtra, India. "Casserole". April 20, 1993.

Class 3. 165747. Malhotra Shaving Products Ltd., Indian Co. of Malhotra House, 6-3-1186, Begumpet, Hyderabad-500016, A.P., India. "Protective cap-cum-single magazine carrier for cartridges" June 11, 1993.

Class 3. No: 166054. Kemicare Products Pvt. Ltd., Indian Company 32, Armenian St., Calcutta-700001, W.B., India. "Container without cap". August 20, 1993.

Class 4. No: 164706. Wipro Limited of Bakhtawar, 14th floor, 229, Nariman Point, Bombay-400021, Maharashtra, India. "Bottle". August 26, 1992.

R. A. ACHARYA,  
Controller General of Patents & Designs  
and Trade Marks